

Application No. 09/997,790

STATUS OF THE CLAIMS

1. (Currently Amended) A method for inspecting any of the properties of a
5 computer, said computer's configuration, contents of said computer's storage
devices, said computer's peripherals, and said computer's environment,
comprising the steps of:
 providing at least one inspector library at said computer, said at least one
inspector library comprising at least one inspector and associated methods;
10 sending one or more advisories from an advice provider to said computer,
 wherein said advisories are sent regardless of relevance to said computer;
 ~~evaluating subexpressions at said computer with said at least one~~
inspector; and
 performing an inspection with said inspector at said computer, the
15 inspection comprising any of mathematico-logical calculations, executing
computational algorithms, returning results of system calls, accessing contents of
storage devices, and querying devices or remote computers to inspect any of
said properties of said computer, said computer's configuration, contents of said
computer's storage devices, said computer's peripherals, and said computer's
20 environment; and
 locally determining relevance at said computer of said received advisories,
 said relevance based on said results of said performed inspection.
2. (Original) The method of Claim 1, further comprising the step of:
25 providing an inspector dispatcher associated with an advice client
computer for continually performing relevance determination;
 wherein said relevance determination is driven by a database of relevance
clauses which can be continually evaluated.
- 30 3. (Original) The method of Claim 1, further comprising the steps of:
 sending certain relevance clauses to a remote location;
 evaluating said clauses; and

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returning said clauses after a user is made aware of what is being transferred;

wherein properties of said remote location are learned.

- 5 4. (Original) The method of Claim 1, wherein relevance evaluation is driven in a master-slave relationship by a master machine which tells a slave machine to evaluate a relevance clause.
- 10 5. (Original) The method of Claim 1, wherein properties which can be learned are an arbitrary combination of elementary properties that are determined according to basic calculations.
6. (Original) The method of Claim 1, wherein said at least one inspector is built into said inspector dispatcher.
- 15 7. (Original) The method of Claim 1, further comprising the step of:
providing one or more caches for avoiding heavy CPU and disk access overhead while successfully performing said continual relevance evaluation.
- 20 8. (Original) The method of Claim 2, wherein an object, property name, and/or string selector is dispatched to said inspector dispatcher for relevance evaluation using a method dispatch module in accordance with dispatch information contained within a method dispatch table.
- 25 9. (Original) The method of Claim 8, wherein said method dispatch module performs the steps of:
parsing a clause in a relevance language;
generating a list of method dispatches in response to said parsing step, wherein specific methods are called in a specific order with specific argument
30 lists; and
systematically carrying out a sequence of method dispatches in an appropriate order.

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10. (Currently Amended) An apparatus ~~inspector library for inspecting any of~~
~~the properties of a computer, said computer's configuration, contents of said~~
~~computer's storage devices, said computer's peripherals, and said computer's~~
5 ~~environment, said inspector library comprising:~~

means for receiving advisories at a computer from an advice provider,
wherein the advisories are sent regardless of relevance to said computer; and
inspector library for performing an inspection any of the properties of said
computer, said computer's configuration, contents of said computer's storage
10 devices, said computer's peripherals, and said computer's environment, said
inspector library comprising

at least one inspector at said computer which is invoked as part of
a continual relevance evaluation process; and

one or more inspector methods for performing at said computer
15 any of mathematico-logical calculations, executing computational
algorithms, returning the results of system calls, accessing the contents of
storage devices, and querying devices or remote computers to inspect
any of the properties of a computer, said computer's configuration,
contents of said computer's storage devices, said computer's peripherals,
20 and said computer's environment;

wherein said continual relevance evaluation process locally determines
relevance at said computer of said received advisories in regard to the results of
said performed inspection.

25 11. (Original) The apparatus of Claim 10, further comprising:

an inspector dispatcher associated with an advice client computer for
continually performing relevance determination, wherein said relevance
determination is driven by a database of relevance clauses which can be
continually evaluated;

30 wherein said inspector library is invoked by said inspector dispatcher as
part of said relevance determination process.

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12. (Original) The apparatus of Claim 10, wherein certain relevance clauses are sent to a remote location, evaluated, and returned, after a user is made aware of what is being transferred, wherein properties of the remote location can be learned.

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13. (Currently Amended) The apparatus of Claim 10, wherein said continual relevance evaluation process is driven in a master-slave relationship by a master machine which tells a slave machine to evaluate a relevance clause.

10 14. (Original) The apparatus of Claim 10, wherein properties which can be learned are an arbitrary combination of elementary properties that are determined according to basic calculations.

15 15. (Currently Amended) The apparatus of Claim 10, further comprising:
one or more caches for avoiding heavy CPU and disk access overhead while successfully performing said continual relevance evaluation process.

16. (Original) The apparatus of Claim 15, said Inspector library further comprising any of:
20 a declaration of a [Phrase] to be used in a relevance language;
an association of said [Phrase] to a specific method;
a declaration of a new data type to be used in an evaluation process;
a declaration of a calling prototype of said specific method, including a number and required data types of arguments to be supplied to said specific
25 method;

a declaration of a result data type of said specific method;
an implementation of said specific method in executable form;
a declaration of special hooks associating code to be called on events,
said events including any of inspector dispatcher initialization, inspector
30 dispatcher termination, beginning of inspector dispatcher main evaluation loop,
and ending of inspector dispatcher main evaluation loop;

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a declaration of special hooks associated with creation and maintenance of special caches associated with said specific method; and

an implementation of special event methods and cache methods in executable form.

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17. (Original) The apparatus of Claim 10, further comprising:

a module for linking said Inspector library into said Inspector dispatcher with all declarations evaluated, resulting in changes to said inspector dispatcher's internal data structures, wherein new method invocations become available to said inspector dispatcher.

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18. (Original) The apparatus of Claim 17, further comprising:

a syntax table for providing said resulting changes to all allowed phrases and associated data types on which they operate; and

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a dispatch table for systematically determining an associated executable method for given phrase and data types.

19. (Original) The apparatus of Claim 10, wherein said inspector library is implemented in an object oriented language.

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20. (Original) The apparatus of Claim 10, wherein a plurality of inspector libraries are installed in an instance of said inspector dispatcher to define a set of recognized Phrases in a relevance language, a set of allowable data types at evaluation time, and a set of methods associated with those data types.

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21. (Original) The apparatus of Claim 10, wherein inspector libraries are created by advice providers and downloaded to a client computer as part of a site synchronization.

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22. (Original) The apparatus of Claim 10, wherein said inspector libraries are linked into said inspector dispatcher at the time said inspector dispatcher is initialized; and

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wherein declaration routines are invoked, new Phrases are installed in a lexical analysis table of a relevance language, and said new Phrases are associated to certain method invocations when said linking occurs.

- 5 23. (Original) The apparatus of Claim 10, further comprising any of:
a base layer comprising a mechanism for elementary operations including
any of arithmetic and logic, which are system-independent;
a system-specific layer associated with a specific operating system;
one or more vendor-specific layers for providing access to specific
10 hardware devices and software products; and
additional layers as appropriate, based on other advice providers.
24. (Original) The apparatus of Claim 10, wherein said inspector inspects any of
a version property of an application and properties of files including any of
15 checksum, length, date, and date modified; and wherein said inspector verifies
existence and configuration of any of files, directories, and file systems under a
specific operating system.
25. (Original) The apparatus of Claim 10, wherein said inspector comprises:
20 a system specific inspector for accessing properties of an operating
system and allowing advice to be written to verify the existence and configuration
of attached devices and other subsystems.
26. (Original) The apparatus of Claim 10, wherein said Inspector comprises:
25 a registry inspector for enabling a relevance language to refer to and
evaluate properties of a registry database.
27. (Original) The apparatus of Claim 10, wherein said inspector comprises:
a preferences inspector for enabling a relevance language to refer to and
30 evaluate properties of a preferences file of a specific application.
28. (Original) The apparatus of Claim 10, wherein said inspector comprises:

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a database inspector for enabling a relevance language to access fields in a database.

29. (Original) The apparatus of Claim 10, wherein said inspector comprises:

5 a user profile inspector for enabling a relevance language to refer to data stored in a user profile.

30. (Original) The apparatus of Claim 29, wherein said user profile comprises a dynamically expanding database, such that an advice provider, following a
10 recognized procedure, may add new variables to the database and prompt the user for the values of those variables.

31. (Original) The apparatus of Claim 30, further comprising:

15 a template file for describing a collection of variables to which an advice provider plans to refer in advisories;

wherein said template file is placed at an advice site and is automatically gathered at a synchronization time;

20 wherein said template file is used to drive an editing module on a client computer which presents a user with a list of template variable names and a list of their current values or blanks if they have not previously been defined; and

wherein said user can fill in said blank fields and edit other fields.

32. (Original) The apparatus of Claim 10, wherein said inspector comprises:

25 a remote inspector for inspecting properties of other communicating devices.

33. (Original) The apparatus of Claim 32, wherein said remote inspector inspects any of:

30 remote physical measurements;
remote device queries;
remote computation;
remote database queries; and

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remote relevance invocation.

34. (Original) The apparatus of Claim 10, wherein said inspector comprises:

5 a program log inspector for enabling a relevance language to refer to data stored in a specific log file or files associated with any specific application, wherein said specific log file may comprise any of a web browser log, a telecommunications log, a fax log, or a clickstream log.

35. (Original) The apparatus of Claim 10, wherein said inspector comprises:

10 an advice system inspector for enabling a relevance language to refer to data stored and managed by said inspector dispatcher.

36. (Original) The apparatus of Claim 35, wherein said inspector inspects any of:

15 a subscription database;
an advice database;
inspector dispatchers log files; and
an inspector dispatchers configuration.

20 37. (Currently Amended) In a system including computational devices connected by a communications network, said system comprising a communications apparatus for linking an advice provider to an advice consumer, said communications apparatus comprising specific units of advice to be shared, digital documents conveying said advice, said advice provider for broadcasting
25 said advice in the form of advisories, said advice consumer for receiving said advisories, wherein advisories are broadcast over said communications network from said advice provider to said advice consumer, a communications protocol for narrowly-focused targeting of said advisories to said advice consumer by automatically matching advisories with an advice consumer for whom said
30 advisories are relevant, and an inspector dispatcher associated with an advice client computer for any of continuously and at scheduled intervals performing relevance determination, wherein said relevance determination is driven by a

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database of relevance clauses which can be continually evaluated, at least one inspector library, comprising:

at least one inspector located at said advice client computer; and
associated methods for evaluating subexpressions with said at least one
5 inspector at said advice client computer;

wherein said inspector library is invoked by said inspector dispatcher as part of said relevance determination process; and

wherein said inspector performs at said advice client computer any of
mathematico-logical calculations, executes computational algorithms, returns the
10 results of system calls, accesses the contents of storage devices, and queries devices or remote computers; and

wherein said advice consumer maintains anonymity, privacy, and security by not revealing to said advice provider either that said advice consumer is interested in advice from said advice provider, that said advice consumer has
15 received any particular advice, or that said advice is relevant to said advice consumer.

38. (Original) The apparatus of Claim 37, further comprising:

one or more caches for avoiding heavy CPU and disk access overhead
20 while successfully performing said continual relevance evaluation.

39. (Original) The apparatus of Claim 37, wherein relevance is determined by looking at a database on a server and not by immediate calculation, where said database arose by inspection once or periodically according to an inspector
25 library.

40. (Currently Amended) A method for inspecting a computer at a remote location any of the properties of said computer, said computer's configuration, contents of said computer's storage devices, said computer's peripherals, and
30 said computer's environment, comprising the steps of:

sending one or more relevance clauses to said computer at said remote location regardless of relevance of said relevance clauses to said computer;

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providing at least one inspector library at said computer at said remote location, said at least one inspector library comprising at least one inspector and associated methods;

- 5 locally evaluating relevance of said one or more relevance clauses with said at least one inspector at said computer at said remote location; and
- returning relevance evaluation results from said computer at said remote location after a user of said computer is made aware of what is being transferred.

- 10 41. (Currently Amended) In a system comprising a master computer, a slave computer, and a plurality of advisories comprising relevance clauses, a method for inspecting ~~any of the properties of a slave computer, said slave computer's configuration, contents of said slave computer's storage devices, said slave computer's peripherals, and said slave computer's environment~~, comprising the
- 15 steps of:

- providing a slave relevance evaluator and at least one inspector library at said slave computer, said at least one inspector library comprising at least one inspector and associated methods;

- 20 sending one or more of said relevance clauses from said master computer to said slave computer regardless of relevance of said relevance clauses to said slave computer;

- locally evaluating relevance of one or more said relevance clauses at said slave computer with said at least one inspector in regard to any of the properties of said slave computer, said slave computer's configuration, contents of said
- 25 slave computer's storage devices, said slave computer's peripherals, and said slave computer's environment; and

- transmitting said evaluated relevances of said relevance clauses from the slave computer to said master computer wherein said relevance clauses
- 30 evaluation proceeds in connection with said slave computer as controlled by managed through said master computer.

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42. (Currently Amended) The method of Claim 41, wherein ~~the method inspects remote affiliated computers~~ said advisories further comprise actions associated with at least one relevance clause, the method further comprising the steps of:

- 5 sending said actions from said master computer to said slave computer;
 presenting said relevance clauses that are determined to be relevant
 based on said transmitted evaluated relevances to an administrative user at said
 master computer; and
 conditionally automatically implementing at said slave computer one or
10 more of said actions associated with said relevance clauses that are determined
 to be relevant, based on an acceptance of said actions by said administrative
 user.

43. (Previously Presented) The method of Claim 1, further comprising the step of:

- 15 performing with said inspector at said computer querying any of devices
 and remote computers to inspect remote affiliated computers.

44. (Previously Presented) The apparatus of Claim 10, further comprising:

- 20 at least one inspector method for performing at said computer querying
 devices or remote computers to inspect remote affiliated computers.

45. (Previously Presented) The method of Claim 40, wherein the method inspects remote affiliated computers.